HABITAT CONSERVATION PLAN
Technical Advisory Committee
May 16, 2006. 7:00am – 11am
El Rio Medio Restoration Project and HCP Santa Cruz River Fieldtrip
and U.S. Fish and Wildlife Service Office
201 North Bonita Avenue
Tucson, Arizona 85745

MEETING SUMMARY

Attendees: Guy McPherson, Trevor Hare, Ann Phillips, Rich Glinski, Linwood Smith, Dennis Abbate, Marit Alanen (USFWS), Lori Anderson (Coalition for Sonoran Desert Protection), Karen LaMartina, Linda Smith and Laura Macklin (Tucson Water), Rod Lancaster (Tucson Audubon Society), Jennifer Becker and Thomas Helfrich (Pima County Flood Control District), Mark Myers (Marana consultant), Peg Weber (City of Tucson – Parks and Recreation), Alison Jones (City of Tucson – Environmental Services), Michael Ingraldi and Scott Blackman (AGFD), Michael Wyneken (City of Tucson – Office of Conservation and Sustainable Development), Leslie Liberti (City of Tucson – Office of Conservation and Sustainable Development), Jessica Lee and Geoff Soroka (SWCA)

1) Update on Recent SAC Meetings/Upcoming Meetings

a. *Recent/Scheduled SAC Meetings:*
- April 19, 3-5 pm, @ AGFD.
- Future Meetings TBA

b. Scheduled TAC Meetings:
- June 6, 2006. 9am-11am @ AGFD.
- First and Third Tuesdays, 9am-11am @ AGFD.

2) Old Business

a. Meeting Minutes – March 21, April 4 and 18, 2006

The TAC postponed the discussion of these meeting minutes until the June 6 meeting due to the fieldtrip.

3) New Business

a. *El Rio Medio Restoration Project and HCP Santa Cruz River Sub-area Site Visit*

The group visited three sites along the Santa Cruz River, within the 4.7-mile U.S. Army Corps of Engineers El Rio Medio Restoration Project planning area. Leslie asked the group to evaluate the sites in terms of habitat restoration potential. She stressed that the fieldtrip was part of a brainstorming session to aid in the development of a locally preferred alternative for El Rio Medio, as well as to provide on-the-ground information for the TAC. The City provided large orthographic maps so the group could place each site within a wider context of the river system.

The first site was located north of the Congress Street Bridge. The area has soil cement bank stabilization, and the bottom of the river channel is approximately 15 feet below the upland area. The Santa Cruz River Park paved path runs along both sides of the river. Scattered mesquite trees, watered by drip irrigation, fill the area between the path and adjacent streets. It was mentioned that these trees are kept well trimmed by the City for public safety reasons, and the minimal midstory and understory vegetation that was observed in the uplands area was intentional. Within the river channel, sediment has been deposited along the steep banks in some areas, creating microenvironments for seep willow, desert broom, tamarisk, Mexican paloverde, and mesquite (velvet and Chilean). Ann noted that a grade control structure is located in the river channel just north of the bridge. She also noted that harvested rainwater could be diverted from nearby buildings and roads, and then channelized into contoured swales within the uplands area containing mesquite trees, in order to irrigate the vegetation. However, she acknowledged that this would lead to the growth of understory vegetation, which could compromise the public safety efforts. The group noted that the mesquite trees were predominately a Chilean mesquite hybrid, and pointed out the non-native plants (including buffelgrass) growing in the river channel.

The second site was located at a former bend of the Santa Cruz River that was cut off from the main channel in 1983, leaving an isolated, deep pit. There was evidence of sitting water in the bottom of the pit. Bank stabilization near this site is approximately four years old. Jennifer noted that this site was located near the section of Kinder-Morgan gasoline pipeline that broke in 2003. Medium-density housing developments surround this site to the west. Extreme soil erosion/piping was observed along the west side of the bend. Ann noted that saltbush is a good soil stabilizer along steep banks. Desert broom was observed growing in the bottom of the pit.

The third site was at the confluence of Silvercroft Wash and the Santa Cruz River, north of the river bend site. Soil was moist in the cement-lined Silvercroft channel, although the source of the moisture was not clear. It was noted that a landfill is located adjacent to this site, to the west, and that the landfill is a former sand and gravel pit that was purchased by the City and converted to an unlined, unregulated trash dump in the 1950s. There is a current plume of contamination [including perchloroethylene (PCE) and trichloroethane (TCE)] in the groundwater beneath the landfill, moving in the northwest direction. The contamination is currently being remediated by injections of lactate, a nutrient that is metabolized by micronutrients as they break down PCE. Air and water are not being injected into this site as they are at the Rio Nuevo landfill. It was noted that it would be possible to plant vegetation on top of the landfill as long as the plants could survive on rainfall alone, because Pima County would not want too much active irrigation moving through the landfill. It was also noted that soil cement bank stabilization exists throughout the entire stretch of the El Rio Medio planning area. The group noted that the Anza Trail committee wants to recreate a camp along the Santa Cruz River near this location. Trevor noted that Phil Rosen (University of Arizona) has suggested terracing the sides of the Santa Cruz River, to create more gradual and natural ingresses and egresses. Buffelgrass was observed at this site and on the landfill. It was noted that the vegetation in the uplands area, near the confluence, was completely supported by rainfall.

b. Discuss tour and City of Tucson Environmental Resource Report Update

It was noted that any locally preferred alternatives needs to be submitted to USACE within two months, in order to be included in the plan formulation timeline. The group noted that 10,000-acre feet of water a year is allocated for conservation uses, but that there are no agreements in place about how to allocate it between projects. Allocation is currently "first come, first served" in terms of finalized HCPs. Karen noted that, in terms of providing water for irrigation, the City has extra reclaimed water in the winter months, and less in the summer months, however, the conservation pool does not have to be restricted to reclaimed water.

The group suggested specific comments for El Rio Medio and the Santa Cruz River planning sub-area:

General Channel Comments; All Sites

- Look at Phil Rosen's Pima County Wash Analysis (for herps and amphibians). Determine what occurs at the confluences with the Santa Cruz River for these species. Water availability is the key in providing habitat for them.
- Use development runoff wherever possible.
- Punch holes through soil cement for burrowing owl burrows (small trials), keeping biological guidelines and solar orientation in mind. Consult with biologists regarding appropriate placement.
- Adapt metal bridges for bats.
- Install grade-control structures downstream from confluences as prospective locations for "Restoration Islands", keeping in mind river geology issues and locations of clay lenses.
- Create "restoration islands" in-channel and on the overbank; determining appropriate patch size, vegetation composition, and distance between patches, in order to provide needed support for birds and other wildlife.
- Mike Ingraldi from AZGF made the following suggestions regarding in-channel strategies:
    - Create wetland depressions, with grade control structures and effluent lines, to keep trees alive during drought
    - Do not forget the importance of heterogeneity
    - Try for 3- to 4- acre patch sizes
    - Create continuous "islands" in the channel, at line-of-site distances apart, consisting of wetland pockets with clay lenses, in order to keep water near the surface, and grade control structures, to help impound channel flows
    - "Islands" would be built up with boulders and woody debris
    - Tom Helfrich has said that "island" size should be constrained by flood conveyance needs

- Create upland scrub pockets on the overbank, incorporating the following ideas:
    - Maximize water harvesting
    - Consider the Regional Trail Master Plan, regarding trail/use standards
    - Steep slopes can be planted with dense saltbush communities to minimize erosion and water usage, also providing good wildlife habitat and a community that is self-seeding

- USACE proposals should be at appropriate scale, aiming for smaller, attainable victories as opposed to one grandiose pipedream
- Create more dense "vegetation islands" on the overbank of the river, using water harvesting with reclaimed water as a back-up, noting that these "islands" are sometimes found in association with runoff from large parking lots (see patch west of the Pima Community College campus, south of Irvington Road)
- Note that more reclaimed water is usually available in the winter months through April
- Maintain old evergreen tamarisk trees because of the vertical structure and deep shade they provide (remove deciduous tamarisks, which are more invasive and provide poor habitat)
- Where parks are near the river, use park irrigation to support natives having high water usage
- Create a plant palette for Parks department to use when replacing large plants, including trees and shrubs

River Bend Site

- Create limited cottonwood/willow gallery nodes, with other vegetation as a matrix:
  - Note that the support of these trees when they get large will necessitate lots of reclaimed water irrigation to supplement water resources
- Examine water recharge and other potential multiple benefits:
  - Use Gilbert Ranch as a model of a multiple use basin
  - Note that the river bend site is near a landfill, and this may pose implications for trying to recharge water here
  - Try to recharge reclaimed water during low demand period (winter)
  - Note whether the site has a clay lens to help retain the water

4) Call to the Public

No members of the public spoke up.

5) Next Steps/ Future Meetings

The next TAC meeting is scheduled for June 6, 2006, at the Arizona Game and Fish Department meeting room. The meeting format will be that of a regular TAC meeting, and is expected to wrap up discussions on the Santa Cruz River planning sub-area.

A subcommittee meeting to discuss specific recommendations for the locally preferred alternative for El Rio Medio will be held on June 6 at 7am at the Tucson Audubon Society office.

Leslie distributed copies of the draft for the proposed expanded conservation targets for the City HCP planning process and an explanation of how SWCA created the list. She asked TAC members to look over the list before the June 20 meeting, when the group would begin discussing the expanded planning area.